

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number  
**WO 2005/000168 A1**

(51) International Patent Classification<sup>7</sup>: A61F 2/24, 2/06

(21) International Application Number:

PCT/US2004/021046

(22) International Filing Date: 28 June 2004 (28.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/483,035

27 June 2003 (27.06.2003) US

(71) Applicant (for all designated States except US): UNIVERSITY OF SOUTH FLORIDA [US/US]; 4204 E. Fowler Avenue - FAO 126, Tampa, FL 33620 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KNIGHT, Joseph, Allen [US/US]; 16116 Compton Palms Dr., Tampa, FL 33647 (US).

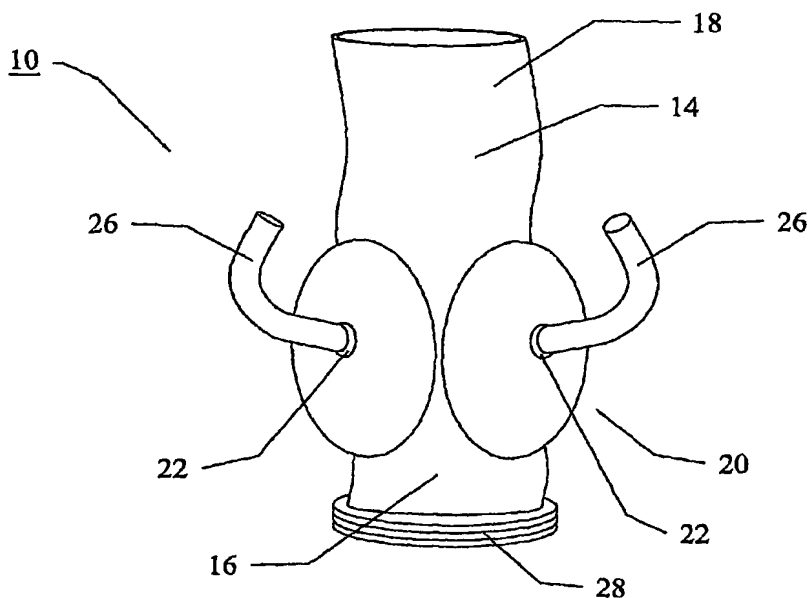
(74) Agents: PACE, Doran, R. et al.; Saliwanchik, Lloyd & Saliwanchik, A Professional Association, PO Box 142950, Gainesville, FL 32614-2950 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: VASCULAR PROSTHESIS



(57) Abstract: The subject invention concerns vascular prosthetic devices and methods for ascending aorta and/or valve replacement in humans and animals. In one embodiment, a device of the invention includes a vessel-like structure having a first end adapted for surgical attachment to a left ventricle, a second end adapted for surgical attachment to an aorta, and, interposed between the first and second ends, a sinus portion configured in the shape of the sinuses of Valsalva in a human aortic valve.

WO 2005/000168 A1



**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*